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Federal Communications Commission

Re: Docket Item 25-133 (In Re: Delete Delete Delete)

I am writing in response to the call for comments on regulations that create unnecessary burdens. I offer a few thoughts as regards the Amateur Radio Service (Part 97).

The Commission faces a particular challenge when it comes to regulating the amateur radio service. We are an experimental service, where operating practices and spectrum use evolve over time. The evolution occurs worldwide, and there have been times where the amateur radio service in the US has been challenged by the need to update Part 97 to reflect that evolution, but the FCC properly needing to give higher priority and greater attention to other radio services.

Accompanying this letter are two documents. One is a proposed draft of an updated Part 97 (plus two updated sections of Part 1 and Part 2), while the other compares the proposed language to existing language (subject to the constraints of my limited skill with Microsoft Word) with additional commentary regarding those changes.

In general, I propose a simplification of the amateur radio licensing structure and emission type authorizations within amateur-authorized spectrum, and essentially the establishment of a framework where the amateur radio service can function more as a self-regulating sandbox for experimentation, while still retaining FCC oversight should the sandbox be breached or become too raucous.

Simplified license structure – I propose transitioning the amateur radio service to a two-class license structure. Both classes would be authorized to transmit on all frequencies authorized for amateurs, but the lower class ("Basic") would be restricted to lower power operation and would not be authorized for the various Special Operations enumerated in the 97.200's. The higher class ("Full") would have the same operating privileges currently afforded to Amateur Extra class license holders.

This structure is specifically inspired by the Canadian amateur radio license structure, but this general approach is common in many other countries.

This is, of course, a significant change from the current incentive licensing structure that has been in place for several decades. However, an argument could be made that the rationale behind the introduction of incentive licensing – encouragement of the development of electronics and communications skills during the Cold War and the associated competition with the Soviet Union – doesn't quite work in today's world. The enthusiastic embrace and emphasis

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of STEM education in the country's schools, robotics clubs in schools, and the rise of "making" as a hobby that encourages the development of technical skills alleviates the need to push individuals to pursue such by tempting them with access to additional amateur radio spectrum.

We see a weakness in the current practices in the form of the ARRL request to grant access for Technician class licensees to additional spectrum, due to the evolution of the service…and the fact that the request has been pending for several years.

A shift to a simpler licensing structure would simplify Part 97 and likely relieve the Commission from fielding further such requests, while bringing American amateur radio licensing more in line with international norms.

General removal of frequency authorizations by type of emission – Today, Part 97 is rather unique globally in restricting RTTY/data and phone/image transmissions to portions of the HF bands. While this does have the advantage of promoting, even forcing, the avoidance of interference by directing certain transmissions to certain portions of the bands, this has the side-effect of restricting American amateurs from more efficiently using their authorized spectrum.

This can be particularly seen during amateur radio contest weekends. During a large phone contest, we may see half of an individual band filled with signals…but adjacent frequencies, authorized only for RTTY/data use, empty and unused…or filled with phone emissions from non-US stations. An analogous situation arises during RTTY contests.

Since the current structure was adopted, we have seen the emergence of digital phone modes which "sound" like some RTTY/data emissions, and our current regulations severely inhibit American amateurs from experimenting with emission types that could be used to transmit both phone and text.

I also note that several years ago, the ARRL did propose revising the dividing line between RTTY/data and phone/image on 75/80m….and that matter has also been pending before the Commission for several years.

I propose removing constraints on emission types by frequency, and shifting to a general specification of maximum transmission bandwidth. The details in the accompanying documents are drawn from current amateur radio authorizations in Canada, but this structure is common in every other country I'm familiar with.

Restoration of the safe-harbor power limits for 97.13(c) – Several years ago, the Commission removed the exemption of low-power amateur stations from being required to document an RF exposure analysis. While such analyses are generally not difficult in the context of amateur radio operations, they are a bit of a headache when considering how some amateur licensees enjoy experimenting with antennas, or operating in parks or on hilltops for just long enough to make a few contacts. I propose generally restoring the prior exemptions, as the analyses performed for such stations virtually always show no risk.

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Clarification of the prohibition of obscuring the meaning of transmissions – Current language in Part 97 constrains or creates ambiguity for certain operations that amateurs wish to experiment. One example would be the use of WiFi within the amateur service on frequencies shared with the Part 15 WiFi used by the general public. Amateur transmissions should be secured to avoid non-licensed individuals from accidentally interacting with amateur radio activities for which they are not authorized.

Canadian regulators, working in conjunction with Radio Amateurs of Canada, have recently clarified their stance on this issue, formalizing the idea that the use of encryption technology does not violate the principle that radio amateurs shall not obscure the meaning of their transmissions when encryption keys are public, with RAC establishing a centralized online repository for the publication and dissemination of these keys.

I propose incorporating a similar clarification into Part 97, perhaps constrained to 70 cm and shorter wavelengths to minimize concerns on the implications for transmissions that could be received internationally.

Delegating the details of license grants / modifications / renewals, and general oversight of amateur radio operations to a private organization – In keeping with the notion of not burdening the Commission with policing and administering activities within the sandbox of amateur spectrum, I propose the establishment of an organization (the "Amateur Radio Administrator") to oversee the granting, modification, and renewal of amateur radio licenses, assignment of call signs, maintain appropriate guidelines on the use of certain modes, emission types, or bandwidths within the broad rules proposed for Part 97, and perhaps to exercise limited enforcement authority

This idea is simply an expansion on the limited delegation of some duties the Commission has already undertaken, such as maintenance of the Amateur radio exam question pools, the volunteer examiner system, the issuance of special event call signs, and the review of applications for club licenses.

The amateur radio service has a long history of self-regulation and self-administration. I propose expanding that, in the process reducing the administrative burden on the FCC.

In addition to those potential revisions, there are two other areas where Part 97 perhaps could be simplified, but where I do not feel I have the expertise to suggest specific language.

Part 97 rules on amateur space stations – I am concerned that the language currently present in Part 97 may be excessively burdensome on amateur experimentation with satellite communications, but I acknowledge that there is a legitimate regulatory interest in seeking to minimize the risk of collision of satellites and creation of additional orbital debris. I also wonder whether the Part 97 language might be redundant with other regulations in place. I would support simplification, although I am not able to propose specific changes.

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The use of emission designators in the definition of emission types – A general theme in my proposal is that it is an attempt to remove restrictions and permit the amateur radio service flexibility to evolve with minimal encumbrance on the FCC. To the extent that the general emission types of "RTTY", "data", "phone", "image", etc. are still required under my proposal, I do wonder whether the formal definitions could be simplified to support flexibility as technology evolves. For example, I recall a minor rule revision was required several years ago to facilitate amateur use of DMR, and there was some confusion over whether one particular amateur RTTY mode fell under the definition (and therefore frequency restrictions) of spread-spectrum. It would be good for amateur radio, and less burdensome on the FCC, if formal rule changes were required to support such changes in the future. However, it is beyond my expertise to suggest how such a change could be made.

I appreciate the opportunity to comment on this matter.

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